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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 10/001,499 | 11/14/2001 | Ligui Zhou | 0179.0029 | 3237 |

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| EXAMINER |
|---|
| MAKI, STEVEN D |

| ART UNIT | PAPER NUMBER |
|---|---|
| 1733 | |

DATE MAILED: 10/01/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

| Office Action Summary | Application No. | Applicant(s) | |
|---|---|---|---|
| | 10/001,499 | ZHOU ET AL. | |
| | Examiner | Art Unit | |
| | Steven D. Maki | 1733 | |

*-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --*

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

1)☒ Responsive to communication(s) filed on *05 August 2002* .

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

4)☒ Claim(s) *1-38* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-38* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

**Application Papers**

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11)☐ The proposed drawing correction filed on _____ is: a)☐ approved b)☐ disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12)☐ The oath or declaration is objected to by the Examiner.

**Priority under 35 U.S.C. §§ 119 and 120**

13)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____ .

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

a) ☐ The translation of the foreign language provisional application has been received.

15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) *4* .
4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: .

1) The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2) The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

3) **Claims 26-29 and 31-38 are rejected under 35 U.S.C. 102(e) as being anticipated by Zhou et al '910 (US 6508910) or Zhou et al '257 (US 6440257).**

US 6508910 and US 6440257, which were filed before this application, each have a different inventive entity than this application. This rejection cannot be overcome by filing a statement that "the application and the reference were, at the time the invention was made, owned by, or subject to an obligation of assignment to, the same person" since this is a 35 USC 102 rejection instead of a 35 USC 103 rejection. In other words, applicant cannot rely on the prior art exclusion under 35 USC 103(c) to overcome this 35 USC 102(e) rejection. Claims 26-29 and 31-38 are not entitled to the benefit of the filing date of either of the parent applications since each of these claims are not directed solely to the subject matter of the parent applications. Examples:

Claim 26 describes "tetrafunctional" epoxies which is not disclosed in the parent applications. Claims 27 and 28 describe "dicyandiamide" which was not disclosed in the parent applications. Claim 29 describes a set of ranges which were not described in the parent applications. Without the benefit of the filing date of the parent applications, the filing date of claims 26-29 and 31-38 is 11-14-01 (the filing date of this CIP application) which is after the filing date (2-27-01) of US 6508910 and the filing date (5-18-00) of US 6440257, which as noted above each have a different inventive entity than this application.

As to claims 26, 31 and 35: Although Zhou et al '910 / '257 do not disclose "tetrafunctional" epoxy, Zhou et al '910 / '257 do describe "difunctional" epoxy and thereby anticipates these claims.

As to claims 27-28, 32-33, 36-37: Although Zhou et al '910 / '257 do not disclose "dicyandiamide", Zhou et al '910 / '257 do describe "3, 3diaminodiphrnylsulfone" and thereby anticipates these claims.

As to claims 29, 34 and 38: The claimed composition is anticipated by the composition of Example 1 of Zhou et al '910 / '257.

4) The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970);and, *In re Thorington,* 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

5) **Claims 1-38 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-32 of U.S. Patent No. 6508910.**

Although the conflicting claims are not identical, they are not patentably distinct from each other because claims 1 (prepreg), 10 (honeycomb) and 17 (method) of this application fail to exclude the limitation of "thermoplastic fillet forming particles are selected from the group consisting of densified and micronized thermoplastic particles which have a glass transition temperature that is above 200°C" in claims 1 (prepreg), 9 (honeycomb) and 20 (method) of US 6508910. Indeed, the above noted limitation is found in dependent claim 3 of this application. With respect to "a thermoplastic viscosity control agent which is substantially dissolved in said thermosetting resin, said thermoplastic viscosity control agent being selected from the group consisting of polyetherimides and micronized polyethersulfone" in claims 1, 10 and 17 of this application, claims 1, 9 and 20 of US 6508910 recite "a thermoplastic viscosity control agent which is substantially dissolved in said thermosetting resin". Furthermore, claim 17 of US Patent 6508910 recites "said viscosity control agent being selected from the group consisting of thermoplastic polyetherimides and micronized polyethersulfone". In any event: It would have been obvious to one of ordinary skill in the art to use polyetherimide or micronized polyethersulfone as the viscosity control agent in claims 1, 9, and 20 of US 6508910 since (1) claims 1, 9 and 20 require a viscosity control agent

and (2) polyetherimide or micronized polyethersulfone are well known / conventional viscosity control agents per se.

As to claims 1-16, 30-31 and 35 of this application, note claims 1-32 of US 6508910.

As to claims 27-29, 32-34 and 36-38: It would have been obvious to include 3, 3 DDS (an aromatic curing agent) as the curing agent for the thermosetting resin of the claims of US 6508910 since 3, 3 DDS is taken as a well known / conventional per se curing agent for thermosetting resin. The claimed composition as set forth in claims 29 and 38 would have been obvious and could have been determined without undue experimentation since the composition of the claims 18 and 31 of US 6508910 describe a combination of difunctional and trifunctional epoxy resins, a curing agent, a thermoplastic viscosity control agent and a thermoplastic fillet forming particles. As to the curing agent being an aromatic curing agent, note the above official notice.

**Allowable Subject Matter**

6) **Claims 1-25 and 30 (but not claims 26-29 and 31-38) would be allowable if the obvious type double patenting rejection over US 6508910 is overcome by filing a proper terminal disclaimer. Claims 26-29 and 31-38 have not been included with the above noted indication of allowable subject matter since they are rejected under 35 USC 102 and a terminal disclaimer fails to overcome a 35 USC 102 rejection.**

Remarks

7) The terminal disclaimer filed 8-5-02 is proper and has been recorded. Accordingly, no obvious type double patenting rejection over application 09/573760 now US Patent 6440257 has been made.

No 35 USC 101 double patenting rejection over US 6440257 or US 6508910 has been made since "said thermoplastic viscosity control agent being selected from the group consisting of polyetherimides and micronized polyethersulfone" in claims 1, 10 and 17 of this application causes each of the claims in this application to have a different scope than each of the claims of US 6440257 or US 6508910.

As to the change to paragraph 20, support is found for example in original paragraph 20, paragraph 40 and original claims 24 and 25.

8) Any inquiry concerning this communication or earlier communications from the examiner should be directed to Steven D. Maki whose telephone number is 703-308-2068. The examiner can normally be reached on Mon. - Fri. 7:30 AM - 4:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Ball can be reached on (703) 308-2058. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0661.

Steven D. Maki
September 25, 2003

Steven D. Maki 9-25-03
STEVEN D. MAKI
PRIMARY EXAMINER
~~GROUP 1300~~
AU 1733